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REVIEW OF DR. TULLY'S SYNOPSIS OR CLASSIFICATION.

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A Plea for a True Classification for Materia Medica.

WHEN entering a new field of labor, important advantages will be gained by taking a general survey of it in the outset, ascertaining its boundaries, making out its natural divisions, and estimating the amount and kind of labor that will be required in each. We shall then know better where to begin, how to proceed, how to avoid useless and unprofitable labor—can take truer note of the progress we are making, and having more precise and definite objects in view, can labor with more rational hopes and a truer ambition. The advantages thus gained, especially if the field is of large extent and varied soil and surface, will far more than compensate for this seemingly extra labor. In the cultivation of science, very similar though still more important advantages will be gained from a synopsis, one object of which is to give us a general view of the whole subject. A synopsis or classification not only helps the memory, but essentially aids us in taking just views of any department, in attaching due importance to each individual fact or object of a science, besides enabling us to take a more just and comprehensive view of it as a whole. It has somewhat the effect of a magnifier, the necessity for which is in proportion to the distance or minuteness of the objects to be examined; whereas the necessity of a synopsis or classification is in proportion to the number and diversity of facts or objects which the science includes. When these are but few and small, there is but little need of classification; but in materia medica they are so numerous and their diversity is so great, we shall work and investigate at random, and make but slow, wearisome and uncertain progress without it.

To show the magnitude of the pharmacologist's undertaking, it has been said, "he must know the effects and influences which all the substances and agencies in nature are capable of producing upon

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disease, before it can be said, in literal strictness, to be complete." (*Bartlett.*) Making due allowance for the illusion of such a view, or bating the extravagance of this assertion, the truth that will remain must be appalling, and make him feel the need of a synopsis or the simplifying effects of general views and comprehensive classification. But when he sees all the substances and agencies required, numerous as they may still be, reduced to twelve or twenty clearly defined classes, and those comprehended in each class arranged in as well defined groups, and that they are to be studied in groups and classes, he can take courage.

The immense accumulation of therapeutic agents, for which no individual nor class of individuals can be to blame, is nevertheless a just cause of complaint. Doubtless a large proportion of those now thought worth retaining are to be discarded eventually. They are to be discarded, or many of them at least, not because they are incapable of producing salutary and even curative effects, but because of their inferiority in this respect to analogous ones. But there is only one way to ascertain their inferiority, and that is by bringing together those that are analogous, that a comparison may be instituted; and the only way to prevent a constant increase of the evil, when a new remedy is brought forward, is to find out its true position and make the comparison. Classification, therefore, must inevitably precede the discarding process, and those most anxious to commence the latter should be most zealous in favor of the former.

Another effect of a true classification will be to harmonize the views of those who adopt it, or at least, to produce a common understanding among them, without which it will be impossible for them to labor in concert or become mutual helps, prompters or correcters. When those engaged in the same pursuit do not understand each other precisely, how can they be expected to view things in the same light, become harmonious in their opinions or criticize each other to any purpose; indeed, how can they know whether they see and think alike or not. Hence nomenclature is so intimately connected with classification as to be wholly inseparable from it: a true classification must have a correct nomenclature; it would be chimerical to think otherwise. Inappropriate names will be differently understood by different individuals, and thus not only lead to error and confusion, but wholly interfere with the unity or concert of effort and reciprocity of results so essential to the advancement of *materia medica*. For this, a true classification, with a correct nomenclature of course, is about as needful as a skilful commander in conducting a campaign; it furnishes voice, and becomes the medium of a common understanding throughout the ranks of its cultivators.

Again, an arrangement of facts, objects or phenomena, according to their individual peculiarities, and in such a manner as to show their true relationship, is often the very thing that leads to new and valuable discoveries. A knowledge of the relations subsisting between

the heavenly bodies has led to most of the important discoveries in astronomy; while incalculable benefits have resulted to chemistry, botany and other natural sciences from modern improvements in their respective classifications and nomenclatures—benefits that never could have been realized without these improvements. A new fact may be of but little consequence in itself considered; the clearer views it gives us of the relations subsisting between those previously known, and the facility it affords for further investigations, being the principal benefits resulting from its discovery. Hence, the farther we advance in a science, or a knowledge of these relationships, the greater are our facilities as well as our inducements for further advancement. The success of those scientific men to whom the world is so largely indebted has consisted, not so much in the discovery of new facts or materials, as in their having reduced to science and put a true estimate upon those already known; to their having shown their true relationships, which gave to each a new significance and importance, and thus indicated the true course of investigation and made it easy, or cleared the field and made it attractive.

This, when rightly considered, may be the most weighty consideration in favor of a true classification for materia medica. If the benefits resulting from it should prove equal to those that have been realized in other sciences, as there is every reason to think that they would, we cannot feel too much solicitude on the subject. The issues, in which physicians themselves as well as their employees have a stake, are, the continuance of disease or the restoration of health, death or the prolongation of life. To what higher purposes can the aid of science be invoked?

If it must be admitted that our knowledge of classification, or what strictly belongs to the science of materia medica, has had but little to do with our success in the use of medicines as yet, we are by no means to infer from this that the perfection of the science is not precisely what is needed to perfect ourselves in the art of physic. No rapid improvement in the use of medicines can be looked for till they are classified and arranged, and upon true principles; and, in order that the practice of medicine may be carried to the perfection of which it is susceptible, it would not be difficult to show that, notwithstanding the importance of anatomy, physiology, etiology, pathology or diagnosis, or any other kind of knowledge of which we can avail ourselves for the counteraction of disease, a true classification for materia medica is still the most important desideratum. Till we have such an one, we are either wandering about or waiting at the threshold, and may justly be accused of arrogance and presumption for withholding our fellowship from certain other outsiders.

But it would be superfluous to argue a point so uniformly insisted on by men of science everywhere, and tacitly admitted by all, were it not that a proposition may be tacitly assented to by the multitude

before it has gained the assent of the understanding, and without any adequate conception of its importance. It would be sufficient to say that any improvement in the classification or nomenclature of a science is an improvement of the science itself.

It would be difficult to theorize medicines out of use. While mankind are subject to pain and peril from disease, they will instinctively resort to them for help, and a science of medicine will be one of their necessities.

It has been said that *materia medica* is not a science, and more than intimated that it never can be. But has it not facts in abundance that wise and learned men have been accumulating for ages; nay, has it not a sure and enduring foundation to a considerable extent already laid? The facts or materials may be in such disorder as to be but dimly perceived at present; not knowing their true places or relationships, we do not comprehend their use and importance. But this only shows the need of some master hand, which sooner or later is sure to come, to complete the foundation, after which all hands can be employed, and without the aid of any extraordinary genius, to rear the superstructure.

Useless, cumbersome, appalling even as this mass of materials may appear to some, the true scholar, who is necessarily brave and unshrinking, instead of turning from, or casting them overboard, will take the occasion to show that pharmacologists have still a vast work to accomplish, to which they can be neither too expeditious nor too earnest in addressing themselves. We have erred in under-estimating its magnitude and importance. Our knowledge of drugs may be greatly improved, if not perfected; and till we have corrected this error, complied with the requisitions, availed ourselves of the proper means and adopted a true course of investigation, it would be neither scholarly nor wise to talk of dispensing with them. It is too soon for Young America to turn back, or for a veteran in the profession to take credit to himself for "having inaugurated a nature-trusting theory."

Its Plan.

A synopsis will be valuable, of course, in proportion as it furnishes the advantages or answers the purposes that have been alluded to. It is not to be supposed, however, that all the advantages of a true classification can be perceived till such an one has been produced, probably not till we have long been partakers of its benefits, and perhaps not till *materia medica* shall have been redeemed from its present semi-chaotic state. The labors of scientific men have often proved more valuable than they themselves anticipated. When successful, "they have builded better than they knew."

It would be easy to make an arrangement for *materia medica* that would be quite systematic, but without its being in the least degree useful for the purposes mentioned. Indeed, all the arrangements heretofore proposed came far short of answering these desired ends.

As in the case of the magnifier, so with a synopsis or classification, whether we get the desired benefits from it or not depends upon its character or construction; its plan or the principles on which it is founded; its consistency and naturalness or the manner in which it has been executed. And the analogy holds good in another respect: any deviation from the plan or slight mistake in its execution will make confusion throughout, destroy its integrity and impair its usefulness to a far greater extent than might be supposed from the slowness of the mistake.

Dr. Tully looked at *materia medica* as one of the natural sciences. He found it in confusion, of course, as had been the case with botany and others no long time previous. The very best thing to be done for it was to reduce it to order or system; and to do this the first step was to find out its natural classification—the plan to be pursued and the principles to be observed in its execution. That this would be attended with extraordinary difficulties was evident from the want of success that had attended all previous efforts of the kind. The plan to be adopted, however, could hardly be mistaken. It was the same that had been pursued to some extent by most authors, viz., to make the operative effects of medicines—the medicinal powers—its foundation. That this is the only plan for a true classification for pharmacology is evident from its having been so generally adopted in part, but more especially from the fact that whatever other plan has been resorted to, a distinct recognition and even a practical use of this has been found unavoidable. The subject cannot be treated of without constant reference to emetics, cathartics, tonics, diaphoretics, &c., as so many different and distinct classes of medicines, founded upon as many different and distinct medicinal powers. And besides, the powers or operative effects of medicines constitute the basis, the facts on which pharmacology rests. These are its elements, with which the pharmacologist cannot make himself too familiar. They have the same relation to pharmacology that the nine digits have to the science of numbers, or the alphabet to written language. What pharmacology most needs is to have its alphabet fully made out and properly arranged. The difficulties may be great, but since our a, b, c's have been so long in use, with such slight alterations, either in their properties, powers or arrangement, and have answered so admirable a purpose, why should we despair? Most assuredly the difficulties of ancient philologists must have been equal to those of modern pharmacologists.

It is obvious that a botanical, chemical and zoological arrangement, such as would best illustrate the fundamental principles of these sciences, though all the articles could be included and thus be very systematically arranged, would answer none of the purposes of a pharmacological arrangement. The medicinal powers—emetic, cathartic, tonic, diaphoretic, &c.—would not be recognized. These

belong only to pharmacology. A synopsis, to answer the purposes or be entitled to the name, must be founded upon the principles of the science it is designed to illustrate. For pharmacology, therefore, a botanical, chemical and zoölogical would be no better than a simple alphabetical arrangement. To adopt either would be like using flat and plain instead of convex glasses in constructing a telescope or microscope. Nor would any other plan than that of making the medicinal powers its foundation be materially better than either of these.

The arrangement of Copland, presented at the close of his admirable essay on Therapeutics, professed to be "according to their *modus operandi* and effects," and which is in some parts, to be sure, founded upon the operative effects of medicines—the medicinal powers, and in others upon their *modus operandi*, but in others upon the parts or organs acted on, in others still upon the symptoms or pathological conditions they tend to obviate, &c.—is about as unphilosophical, heterogeneous and incomprehensible as can be conceived. Whatever advantages it may have in other respects, in directing attention to certain minor considerations for instance, to illustrate the great principles of pharmacology or therapeutics, it is utterly worthless. It tends to confuse rather than to systematize our knowledge. But the incongruity or want of consistency and naturalness so strikingly manifest in this, are more or less apparent in all others heretofore proposed. Though in every one of them the true plan has been adopted and pursued to a certain extent, yet sooner or later there has been a departure from it sufficient to defeat the objects intended, and render it comparatively worthless. There is evidently no arrangement that can take the place or answer the purposes of that founded on the powers or operative effects of medicines, and on these alone. These are the physician's appliances, his tools, with the peculiarities of which he is to become familiar as his first duty. No knowledge of their secondary, incidental or occasional uses, or of their *modus operandi* in certain cases, or of the parts or organs most affected by them, and especially no pathological knowledge, however minute and accurate, can take the place of a right and dexterous use of these. These, therefore, must be the foundation of its synopsis, as they are the foundation of the science itself.

Difficulties in its Execution.

Dr. Tully differed from all his predecessors in his attempt to adhere to this plan strictly from beginning to end. But there were difficulties to be encountered, which had appeared insurmountable to others and turned them aside; and besides, the difficulties themselves had become complicated and made worse by the mistakes that had been committed in every attempt to get rid of them. Now the best way to obviate or solve difficulties, or to correct mistakes, is to fully comprehend them in the outset; and in order that we may judge of the

success of his undertaking, we must take the same view of these difficulties that he did and attend to his manner of solving them. There is simplicity in nature always somewhere, though it often requires profound thought and study, and sometimes genius of a higher order even than Dr. Tully's, to find it. .

The undertaking was analogous to that of Cuvier or Linnæus. It was a purely intellectual or scientific, in distinction from a practical problem, for the solution of which physicians, those especially who are capable of distinguishing themselves as medical writers or practitioners, and who are necessarily practical men, are disqualified by their vocation. It should be no disparagement to them nor to the profession, if for such an object they were obliged to call in the aid of those who have long been devoted to science exclusively. The distinction between the practical and the scientific man, as recognized by one whose name will be familiar to men of science, if not to physicians everywhere, is worth quoting here. He says: "The community should foster the purely intellectual efforts of scientific men as carefully as they do their elementary schools and practical institutions, generally considered so much more useful and important. For from what other source shall we derive the higher results that are gradually woven into the practical resources of our life, except the researches of those very men who study nature, not for its uses but for its truth? It is this that gives it its noblest interest. It must be for the truth's sake, and not for the sake of its usefulness to humanity, that the scientific man studies nature. The application of science to the useful arts requires other abilities, other qualities, other tools than his; and therefore I say that the man of science who follows his studies into their practical application is false to his calling. The practical man stands ever ready to take up the work, when the scientific man leaves it, and adapt it to the material wants and uses of daily life."—(*Method of Studying Natural History. Atlantic Monthly*, Jan., 1862, p. 8.)

Whatever may be said of Dr. Tully as a practical man, no one will deny that he was a man of science. He was more favorably known among scientific than medical men. By the latter he was often called a theorist, yet no medical writings are freer from theories or speculations than his. His fault may have been the one alluded to in the foregoing quotation—that of following his studies into their practical application. But if so, this only renders what he has to say on this subject all the more worthy of consideration.

But the operative effects of medicines were manifold, and it was difficult to decide in all cases which were to be taken as fundamental. It was clear that this could not be arbitrary in a single instance. It would be a great mistake to suppose that it matters little as to what or how many classes are contained in the synopsis. If natural, we can have no choice in either case. There were twelve, however, that had already been decided upon, and in regard to which there was

scarcely room for mistake or disagreement. We shall designate them here by such names as will be familiar or most generally understood, though as in regard to some of them it is hardly possible that they will be understood alike by all without their definitions; these will be given after presenting the catalogue of classes, in which five of them will be changed, mainly for the sake of precision, though partly for the sake of uniformity; for it is desirable that in this, as has been thought best in every other science, there should be uniformity in the names of the classes.

These twelve powers were:—1, antiphlogistic; 2, stimulant; 3, tonic; 4, emetic; 5, cathartic; 6, diaphoretic; 7, diuretic; 8, narcotic; 9, nervine; 10, astringent; 11, antacid; 12, demulcent. Each of these twelve powers had been regarded as fundamental, or had been made the foundation of a class time immemorial, and the name of the class had been made to correspond with the power. Furthermore, it was evident that these powers had been selected as fundamental, not from choice but from necessity. Up to this point all was natural and satisfactory; there was no room for doubt or perplexity. Doubts and perplexities were to come afterwards; but thus far the classification was established, and in such a manner that we could not but accept it.

Though a large proportion, yet by no means the whole, of the articles could be included in these classes. There were many valuable ones that could not naturally, and some that could not by any possibility, be referred to either of them. It is too obvious to remark that in a true classification for *materia medica*, every article and every process that can be usefully employed in the treatment of disease can find a place, and must necessarily be included in some one of the classes. These twelve classes, therefore, so well established that we could neither reject nor change them if we would, did not answer the requirement. By common consent, others were needed. These, of course, were to be founded as the others had been, each upon a power different and distinct from all others. It was obvious, also, that the selection in these cases could not be arbitrary any more than it had been in the others. This was the point at which others had erred; or it was in the selection of foundations for the remaining classes that the greatest difficulty had been experienced and the most important mistakes had been committed.

Before we proceed to the solution of this difficulty, however, there are two others which, though of minor importance, will be better understood in connection with what has just been said, and may therefore be considered as first in order. It matters little which of these difficulties comes uppermost, or if there has been any systematic arrangement of them it has not been shown, even by Dr. Tully, and if we fail of presenting them fairly it must doubtless be attributed to this.

[To be continued.]

CASE OF OVARIOTOMY.

[Read before the Boston Society for Medical Improvement, and communicated for the Boston Medical and Surgical Journal.]

By DAVID W. CHERVER, M.D.

Mrs. W., aged 40, born in Ireland; mother of four children, the youngest ten years of age; always a healthy woman. One year ago, noticed a tumor in the right iliac region, movable on changing posture. It increased rapidly. She went to the Massachusetts General Hospital in May, 1864, and remained there three weeks. Soon afterwards, she was tapped for the first time, and since then has been tapped nine times. Always several pails of dark, ropy, viscous fluid were brought away. Catamenia regular until May—none since. Of late, she has to be tapped every three weeks, and suffers chiefly from distension. Now—March, 1865—is confined to bed most of the time; has a good appetite and digestion, and a reasonable amount of strength. Is a woman of great decision and firmness, and voluntarily desires an operation, being conscious that the tapplings are rapidly approximating, and that she cannot last long as she is. No efforts were used to persuade her to an operation; but she herself determined to take the chances, and was admitted to the City Hospital, under my care.

After tapping, the tumor which remains appears to be about as large as a child's head, to spring from the right side, and to float freely, with the exception of one adhesion to the right side of the abdomen. When distended, the latter offers the dull central percussion, and the resonance laterally, indicative of an ovarian cyst.

Operation.—March 8th, 11, A.M. Bowels emptied by enema. Urine drawn by catheter. Etherized. An incision was made through the integuments, along the linea alba, and to the left of the umbilicus, from midway between the ensiform cartilage and umbilicus, down to the pubes. On dividing the linea alba, a thin sac was exposed, which being accidentally ruptured, a thick, brown, ovarian fluid exuded. It being naturally supposed that this was the cyst, attempts were made to separate it from the abdominal parietes on the sides of the incision. It being adherent, it was again accidentally ruptured, when it was thought best to lay it freely open, the length of the external incision. It was now found to be the cavity of the peritoneum. In it lay the true ovarian cyst, about as large as a human head, communicating with the peritoneal cavity by a triangular, clean-cut foramen, through which a thick, brown fluid exuded, several quarts of which lay in the common cavity of the peritoneum. This being pressed out, the cyst was found to be adherent by only one firm band, as large round as the finger, and three inches long, to the right side of the abdominal walls. Below, the pedicle was attached to the right Fallopian tube and broad ligament, and was about two and a half inches across, when spread out. The adhesion referred to was divided with the knife, and silver wire ligature was

applied to one considerable vessel and left in. Next, the pedicle was included in a long clamp, and then transfixed with a needle, and heavy, double, silk ligature, and tied on each side. The ends of the ligature were made fast to the clamp, and the pedicle divided near the tumor. The clamp was placed crosswise at the lower part of the incision, with the pedicle and ligature outside the abdomen; the peritoneal cavity was gently syringed out with warm water, and the wound closed with interrupted silk sutures.

The patient being in a considerable collapse, one drachm of laudanum, with brandy, was given by the mouth, and ammonia by the rectum; the feet elevated, and heat applied. Reaction began in a few minutes, and at the end of two hours she was removed to bed, and the brandy and laudanum repeated at intervals. 6, P.M.—Surface warm; pulse 100, and quite as strong as before the operation; no pain, no discomfort. Beef-juice and stimulants. 11, P.M.—Perfectly easy; pulse 120; skin hot, but moist. Continue food, stimulants and warmth through night, and one grain of opium in pill, *pro re nata*.

March 9th.—At 1, A.M., began to vomit, and complain of pain; at 6, A.M., much prostrated; at 9, A.M., aspect livid, extremities cool, pulse feeble, no pain, no tympanites, no appearance of hæmorrhage, perfectly conscious, respiration labored. At 4, P.M., she died, twenty-eight hours after the operation.

NOTE.—It being impossible that the small, true ovarian cyst could have contained the enormous quantities of fluid removed at various times by tapping; that fluid being ovarian in character, and an opening existing between the cyst and the peritoneal cavity, the inferences may be drawn:—

1st. That at one of the earlier tapplings the true cyst was punctured, and had ever since poured its contents into the peritoneal cavity, and in consequence of this the true cyst, originally larger, may have shrunk in size.

2d. That all the subsequent tapplings had been from the peritoneal cavity only.

3d. The mistake made in taking the peritoneum for the true sac, considering the dark, ropy, ovarian effusion there, was not unnatural.

The cyst contained several smaller ones; also various cystic, granular growths, like vegetations, and several pints of a fluid identical with that in the peritoneal cavity.

It has seemed to me proper to report this case, on account of the error consequent on the effusion of the contents of the cyst into the cavity of the abdomen, an accidental peculiarity, the result of non-adhesion after tapping; the knowledge of which may guard against a like mistake being committed in some future operation.

MR. SOLLY'S CLINICAL LECTURES ON SCRIVENERS' PALSY.

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THE next case I have to relate is also that of a bank clerk, who has now lost his means of subsistence. It is a sad case, and one in which all remedial agents appear to have failed to effect a cure. At first he improved very decidedly, but he did not persevere with the remedies.

Mr. S——, aged 25, clerk in the ——— Bank, applied to me for advice on the 20th of October, 1863. He states that he has lost the use of the forefinger and the finger next to it, or middle finger; that he first felt a weakness in them about ten days ago, but that he did not like to give up, and therefore worked through it; but it increased so much that at last he could not hold the pen. He did not apply for advice at first, because he thought it was merely a sprain from pulling the ledgers about. I immediately recognized the first stage of scriveners' palsy. His complexion is pale, and he is rather thin, with reddish hair; circulation languid. He states that his family generally are healthy; that he has had no strain on his constitution in any way; that he has been married two years, living quietly and steadily. He has no loss of power above the elbow. There is a certain amount of numbness in the fingers affected, which is increased when holding a pen, or by any pressure upon the fingers. The numbness is not quite constant, but varies from time to time. Sometimes those fingers are fixed, and he has a difficulty in extending them. His hand soon gets very cold; but by wrapping it up he can keep the temperature at its natural standard. Ordered the sixteenth of a grain of strychnine twice a day, with galvanism.

Dec. 4th.—Has continued to take this dose without feeling any inconvenience whatever. He applies the galvanism about 7, P.M., by a battery of two plates of copper and four of zinc. He applies one plate to the front of the forearm, and the other he holds in his hand. Immediately after the application the hand feels quite well, and the improvement lasts some hours. The hand is always better in the morning after a night's rest. It is worse in the middle of the day. He says his hand is much better, and that he believes he could now write again, but he has not tried.

[Mr. Solly showed to the class some specimens of writing.] The above are written with the left and right hand. The latter shows better than any description the immense improvement that has taken place; but I have forbidden his using it again at present.

The next case, unlike the last two, has been one of complete recovery. It is that of a gentleman who, when first attacked, was a resident in eastern climes, and it was not until his return to England that he came under my notice. He was then very anxious about it, and being an intelligent man, but without any medical edu-

cation, naturally enough thought that, as a form of paralysis, it must be indicative of some kind of softening of the brain. When I told him, at my first interview, what was really the nature of his complaint, I took a great load off his mind, and gave him a tonic quite as effectual as the various minerals he had been previously depositing in his stomach. I did, indeed, then effectually "minister to a mind diseased." On asking him to give me a sketch of the rise and progress of his malady, he gave me the following:—

"The first time I ever felt any inconvenient sensation in my right hand was, as well as I can remember, about 1858–59. At that time I had an unusual quantity of writing on my hands—a great deal that was strictly official, and much that was semi-official. The inconvenience I then felt was a cramp throughout the entire hand, which made me often lay down my pen and *straighten out* my right hand with my left. In 1860 a good deal of my writing ceased. I still had much official writing, but semi-officially and privately I had much less to do; and the cramped state of my hand entirely disappeared.

"In 1862–3 my duties required more writing than usual. I imposed upon myself, also, a great deal of writing which did not, strictly speaking, belong to my office, and my hand again began to suffer. Meantime I felt the old sensation of cramp, but towards the end of 1862 it assumed a new form. I then began to feel a pain in my right thumb, exactly as I should have felt had I sprained it. I supposed I had sprained it by excessive writing; and, by the advice of my medical attendant, I bound a piece of white tape tightly round it, and this seemed to give me partial relief. By degrees the pain in the thumb ceased, and was succeeded by a sensation, difficult to describe, in the last two fingers of the right hand. It sometimes was a tingling—a burning sort of tingling—commencing in the tips of the fingers, or most properly most perceptible in the tips of the fingers, and extending up the hand; sometimes it was a numbness in the fingers, occasionally accompanied by sharp but slight shooting pains, which sometimes extended up the arm. I first felt this, as well as I can recollect, about the end of 1862. It gradually increased, never assuming an acute form, but practically rendering my hand much less useful to me than formerly. After writing for a while, I was compelled to pause, from sheer inability to continue writing. This effect increased rapidly, and in March, 1863, I was compelled to do much of my work by dictation. When my hand was in this state I suffered much from depression, probably occasioned by the, to me, inexplicable nature of my ailment. When my hand was at its worst, I felt a dull aching in the fingers affected, and up my arm. I should add that I had long been suffering from severe dyspepsia, occasioned by a long residence in the tropics.

"I used to feel the tingling sensation in the two last fingers of my right hand when I went to bed, and it would continue all night, be-

ing just as perceptible in the morning. But this I have not felt for two months. Still, when I am tired and out of sorts, I feel this sensation at once. I have twice felt it from these causes, without having used my hand for writing, since my last visit to Mr. Solly.

"To-day my hand failed after writing one sheet of note-paper. The effect of the strychnine was an almost instantaneous sensation of slight painful tingling in the same two fingers.

"Dec. 10th, 1864.—The sensation is difficult to describe; sometimes it is a tingling, sometimes a numbness. After writing three pages with the left hand to-day, I felt the sensation spoken of in the right leg."

When this gentleman first consulted me, I advised his using the right hand as little as possible, and gave him general tonics, &c. In August, 1863, I obliged him to discontinue writing altogether with the right hand, and to keep it in a sling; and he soon learnt to write in a very tolerable way with the left hand, but he did not make much progress in recovery. He continued to suffer from all the consequences of a long residence in the East, with severe mental occupation. His strength seemed gone; his appetite failed him; he suffered much from low fever and insomnolence. And though he did not use the right hand, it still felt uncomfortable and miserable. In the August of this year, by my desire, he left England for a more invigorating climate, and remained for two months in a bracing mountain air. The change acted like a charm. He began to walk out and sleep as in the days of his youth; he carried his gun all day, felt no fatigue, and shot with his usual dexterity. During this time, he scarcely ever touched a pen, either with the left or right hand.

After his return to England he felt even still more his sojourn in the hills. He says now:—"Though my hand still occasionally fails me, I can feel that I am all but cured; and if I am tired and out of sorts, my old symptoms return."—*London Lancet*.

ON THE SIMULATION OF AMAUROSIS.

By Dr. R. LIEBRICH.

It is exceedingly rare for individuals with normal sight to pretend that both eyes are blind. Such an occurrence has, however, been noted, as a psychical aberration, in females about the age of puberty. The normal action of the pupils, and the absence of ophthalmoscopic symptoms, are the principal foundations of the diagnosis.

It more often happens that patients who suffer already from advanced amblyopia, assert that they cannot see light with either eye; unable to follow an occupation, they endeavor by this means to gain assistance, &c. It is only after great experience that the surgeon can determine whether certain changes in the choroid, retina, or optic nerve, found by the ophthalmoscope, are sufficient to account for

loss of quantitative vision. Suspicion must arise when a patient asserts that he cannot perceive light, though the pupils act readily, enlarging or contracting according to the different degrees of illumination. No full decision can be come to when a patient asserts that he perceives light but not objects.

Simulated amaurosis of a single, and especially of the right eye, is very common, with the view of escaping the conscription. The individuals are usually well prepared to play their part, and have not unfrequently dilated the pupil by belladonna. Such a state of the iris will often assist the surgeon in detecting imposition, for the pupil is then far larger than in amaurosis. Belladonna not only paralyzes the filaments of the third nerve passing to the sphincter, but stimulates the sympathetic fibres distributed to the dilator pupillæ. In natural mydriasis, the sphincter alone is paralyzed; in amaurosis the muscles of the iris possess their ordinary power; there is no reflex contraction from irritation of the retina; but in every other respect the iris acts in a normal manner. This is the most characteristic sign of monocular amaurosis. It must be remembered that the pupil contracts:—

1. Owing to the action of light on the same eye.
2. " " " other eye.
3. During accommodation for near objects.
4. " contraction of the internal rectus.

Much information may be gained by testing the size of the pupil under these different conditions. In practice the other eye should be closed; the eye to be examined should be held in one position, and alternately shaded and exposed to the light. If, then, the pupil is motionless, whilst it changes in size when the other eye is alternately shaded and exposed, and contracts when the other eye fixes a near object, there can be no doubt that one eye is completely amaurotic. If the iris is motionless under all the conditions mentioned, there is either natural or artificial paralysis. If it moves according to the amount of light, when the other eye is closed, the eye is not perfectly blind, although there may be possibly entire loss of qualitative perception. To decide the latter question, the patient should be induced to believe that the examination of the one eye is finished, and that of the other is commencing; a prism, with its base upwards or downwards, is then placed before the sound eye, both eyes being open. The image is single if the first eye is really amaurotic; but if the blindness is simulated, the patient sees two objects. By testing in this way the power of vision, the surgeon may determine whether the other eye is weak-sighted, and to what degree.—*London Ophthalmic Review*, from *Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques*, i. 787.

 THE BOSTON MEDICAL AND SURGICAL JOURNAL.

 BOSTON: THURSDAY, APRIL 6, 1865.

VENTILATION OF THE STATE HOUSE.—Any one who has had occasion to visit the Representatives' Hall in our State House, during the winter sessions, could not fail to be struck, on entering, by an overwhelming consciousness of the stifling heat, and oppressive emanations from the compact mass of human victims there collected to pass months in a stagnant atmosphere, which seemed to combine everything calculated to frustrate the benignant designs of Providence in the function of respiration. We cannot recal any assemblage of human beings, except, perhaps, the unfortunate inmates of the hold of a hospital ship, who are continuously subjected to such a noxious atmosphere. One who has felt the hebetude which steals over him after a prolonged inhalation of its impurities, can hardly wonder at the *carbonic acid* legislation which sometimes emanates from the unfortunate gentlemen enveloped in it, and which is only disarmed of its pernicious tendency by the invigorating *oxygen* of the Executive Chamber. Truly it has been too much to expect of human brains to be clear, deliberate and sagacious, when day after day exposed to the muddling power of such a devitalized air as our representatives have been compelled to breathe. The difficulty has long been felt and fully realized, but as yet no effectual means have been found to obviate it. The legislature of 1864 took a step in the right direction, however, when they appointed a committee to sit during the recess to improve the ventilation of the Representatives' Hall. The small sum (fifteen hundred dollars) placed in their hands for this purpose, only shows what an entirely inadequate knowledge the members of the House had of the extensive mechanical arrangements necessary to effect such an important improvement. The committee, therefore, could do but little towards this end, but what they did accomplish was so arranged as to form a part of a complete system if it should be adopted hereafter. They set forth, in their Report, in the most forcible language, the great need which has long existed for the contemplated change. So great has been the mortality in years past among the members of the legislature, coming, as many of them do, from the pure air of the country, that the danger to life has actually deterred gentlemen from accepting a place in the legislative halls. The committee refer to such an instance, and go on to present the evil in such a startling manner that we cannot do better than to borrow their language:—

"During the present season," they say, "a gentleman of eminent ability, whose services would have been of great value to the Commonwealth, declined a nomination for senator on that account. Members who have served in the House, and thus acquired practical experience, are unanimous in regard to the enervating and injurious effect produced upon them by a stay therein of only an hour or two. A former President of the Senate remarked to one of the Committee that the oppressive atmosphere of the House was always certain to give him a headache from remaining there only during the time occupied by a convention of the two branches.

"The sanitary history of the legislature of 1864 is a startling commentary upon the danger of allowing such a state of things to continue. To say nothing of the large numbers sick during the session, and those who are known to be suffering from impaired health, consequent upon inhaling the vitiated atmosphere of the House, the number of deaths actually brought to the notice of the House was very surprising. Within three months no less than five members deceased. What would be thought of the same rate of mortality, apart from the casualties of conflict, in a regiment of soldiers? Could men be readily found to enter upon employment so extra hazardous? The House consists of two hundred and forty members; a regiment of soldiers numbers one thousand. At the ratio of legislative deaths a regiment would lose two hundred and fifty men, or one quarter of its whole number, within the three years' term of enlistment. A colonel who should establish, and continue his camp in a situation as unwholesome and dangerous as the Representatives' Hall, would be unworthy of his position and deserve the execration of the civilized world. And yet the servants of the State have for years suffered as gross an indignity. It is not believed that, when the case is properly understood, such a state of affairs will be allowed to continue."

Truly we hope it will not; and the excellent Report before us will do much to bring about the much-needed reform.

The Committee found, on looking into the subject referred to them, that there were various other matters connected with the internal arrangements of the State House which called for improvement, and felt that it was not going out of their province to call attention to these also. These were the very limited and inconvenient accommodations afforded to most of the departments of State and for committee-rooms—the lack of ventilation in all the rooms, and the imperfect and costly system of warming the building, and the danger from fire. All of these are clearly explained in detail, showing very great need of change. In order to present the whole subject in a scientific and practical shape, the Committee applied to Messrs. Shedd and Edson, Civil Engineers, for suggestions, and the document before us mainly consists of their report in response to this call.

This report is a concise, compendious synopsis of what has been done and written on Ventilation. The authors modestly call their remarks on this subject merely suggestions, and do not claim to offer them as a complete treatise upon this intricate subject. Nevertheless, they have taken a cursory view of the whole ground, and have presented it in such an intelligible and interesting form, that we cannot help regarding this unpretending pamphlet as one of the most useful that has ever emanated from the public press of Massachusetts. Want of space compels us merely to glance at the principal topics discussed.

From an introductory chapter on the general subject, the authors go on to the Composition of the Atmosphere, which is treated in considerable detail. Next comes a chapter on the sanitary properties of the Constituents of the Atmosphere, in which the theory of respiration is explained and discussed, and the contaminating influences of noxious gases, too much or too little moisture, and impure emanations of all kinds are fully set forth, illustrated by very interesting facts from natural history, and the pathological history of man. And in like manner we have Temperature, Air Movement, Production and Distribution of Heat, Heating Apparatus and Ventilating Apparatus, discussed and illustrated in a very philosophical and entertaining manner. Thus is laid before the House of Representatives, probably before many of the members for the first time, something like a full and scientific view of the very important subject under consideration.

And we look for an extension of its good influence beyond the walls of the State House also. Indeed, we think it would be an act of wisdom in the Legislature to have this little pamphlet printed at the public expense and scattered broadcast over the State; for what with air-tight stoves, gas stoves, over-heated and closely-shut-up railroad cars, &c., it would seem that this subject of ventilation is just the one about which the community knows little or nothing.

With reference to the special object of their study and inquiry, Messrs. Shedd and Edson present the following conclusions:—

"1. That the supply to the occupants of the State House of fresh air, suitably tempered in heat and moisture, in such abundance as will obviate the necessity of their ever breathing the same air twice, is an object paramount to any considerations of trouble or expense.

"2. That the most efficient, reliable, economical and comfortable mode of heating the building is by steam at a pressure of twenty pounds or more; the heat to be distributed by steam pipes to every part of the building, and to be communicated to the rooms, in part by air warmed by contact with the pipes, and forced in, and in part directly by radiating pipes in the rooms.

"3. That, for the purpose of forcing in and controlling a constant and sufficient supply of fresh air at every point, we would recommend the use of a large fan-blower, of slow motion, driven by steam power. As at present arranged, the degree of ventilation which can be obtained in the Representatives' Hall, depends upon the difference in the temperature of the air in the ventilating flues and that of the air out of doors. There is a limit to the amount of heat which can be applied to the air in the flues, and consequently the change of air in the hall is less in proportion to the increased warmth of the outer air. It is probable that on a very cold day the quantity of fresh air supplied to the hall might amount to four cubic feet per minute for each of three hundred persons; but if the outer air should approach in temperature nearly to that of the air in the ventilating flue, there would be no change, and ventilation would cease. We have seen that it is deemed necessary to supply twenty cubic feet of air per minute for each individual, to insure health and comfort, and provision should be made to secure this amount to six hundred persons in the Representatives' Hall, and to a large number occupying other parts of the building. We consider the application of mechanical power, therefore, to be indispensable, both on account of its necessity for forcing in this large amount of air, and because we cannot be sure that under unfavorable circumstances the ventilation would not otherwise entirely cease.

"4. That, for the exhaustion of the foul air at every point, we would recommend a similar blower, driven by the same power; or, if this prove impracticable, we would provide for the application of heat to the escaping air at all necessary points.

"5. That the best place for the introduction of air, at least in the principal halls, is in or near the ceiling; and the best place for the exhaustion of the foul air is through the floor.

"6. That the orifices for admitting and for exhausting the air should be ample, and as well distributed as practicable.

"7. That the provision for the admission of warm air should be accompanied, for each room, with provision for the supply and mixture, previous to entrance into the room, at the pleasure of the occupants, of as much cool air as will keep the temperature at the most satisfactory point, without diminishing the supply of fresh air."

The members of the Committee, Messrs. Moses Kimball, James M. Stone and Solomon K. Eaton deserve well of the community for the very satisfactory course they have taken in regard to this important matter, and the information which they have been instrumental in diffusing with regard to it. We sincerely hope that our legislators will hereafter, in consequence, have the privilege of breathing a pure atmosphere. Who can doubt that their heads will

be the clearer, and their combined action the wiser for its invigorating influence?

THE NEW YORK MEDICAL JOURNAL.—We have received the first number of a new medical monthly to be published in New York, bearing the above title. It is an elegant pamphlet of eighty-eight pages, and in excellence of matter and beauty of type and paper it is most creditable to its editors. The list of collaborators which it publishes comprises over fifty names of prominent members of the medical profession in New York and elsewhere. We welcome this new periodical with sincere satisfaction. It has been a positive stigma upon the commercial capital of our country that it has not supported a single medical journal. If the future numbers of this new publication come up to the promise of the first, the editors may at least feel that they have deserved success.

PUERPERAL PELVIC CELLULITIS.—Dr. McClintock, in his admirable Clinical Memoirs on Diseases of Women, says of puerperal pelvic cellulitis :—

"Though sometimes very exhausting to the patient's strength, and always tedious in its progress, still the disease rarely ends fatally. Of *seventy* cases of puerperal pelvic cellulitis, coming under my care, I only know of two which so terminated; and in each of these the immediate cause of death was dysentery, apparently brought about by the bursting of the abscess into the colon. There may have been one other fatal case, but I cannot positively say, as the woman went from under my observation. The complaint is a more common sequence of first than of subsequent labors. Of *sixty-one* cases in which I noted this circumstance, twenty-eight, or nearly one half, were primiparous women; though of all the patients delivered in the lying-in hospital, the primiparæ formed only one third." "I agree with Dr. West, that cellulitis very rarely results from genuine puerperal fever; but still my experience will not permit me to doubt that it often succeeds to attacks of metritis, or metro-peritonitis; and Dr. Bennett is of the same opinion." "For example, of *sixty-two* cases, carefully investigated with reference to this particular point, in *thirty-four* there had been well-marked symptoms of uterine or abdominal inflammation, more or less severe, within the first week of childbed."

MERCURIALS IN PELVIC CELLULITIS AND IRITIS.—Prof. Simpson, in his Clinical Lectures on the Diseases of Women, says :—

"I must leave the question to yourselves to settle how far you will mercurialize your patients. It is ordinarily laid down, more particularly by English authorities, in regard to the treatment of iritis and of almost every form of acute inflammation, that the administration of mercury should be had recourse to as one of the most essential elements in it; and in the treatment of pelvic cellulitis I used formerly to have recourse to it in almost every case as a general rule of practice; and I often have recourse to it still in combination with opium, as in two-grain doses every two hours of the calomel and opium pill of the Pharmacopœia. But I begin more and more to lose faith in its

efficacy, for the disease goes on sometimes unchecked even when the mouth is salivated; and I really do not know that we have any certain proof of its power of producing absorption of inflammatory effusions. Ophthalmologists tell us that they can see these effusions beginning to be absorbed in the eye just as the drug begins to exert its constitutional action; but it is assuredly doubtful whether these phenomena stand in the relation of effect and cause, or whether they are not merely coincidences. I have heard Professor John Thomson repeatedly and strongly state that he had occasion to treat forty cases of syphilitic iritis, and having no faith in the reputed power of mercury in the cure of that disease, he treated them without mercury, and succeeded in effecting a cure in all the cases, excepting two, which occurred in the persons of two medical men who had had the misfortune, in the pursuit of their profession, to get their fingers inoculated with syphilitic poison, and who suffered from iritis along with other secondary affections. These two gentlemen had great faith in the power of mercury, and insisted on having it administered to themselves, and in them alone, out of all the forty cases of iritis, did the disease run an unfavorable course and end in loss of vision."

FISSURE OF THE RECTUM SUCCESSFULLY TREATED BY FORCIBLE DISTENSION OF THE SPHINCTER ANI.—Dr. Otis said he wished to call the attention of the Society to the good results following the forcible distension of the sphincter ani, in a case of fissure of the rectum recently under his care—a lady who had suffered for a year and a half from acute pain following each attempt of defecation, and lasting from eight to ten hours. On examination, he had discovered a fissure an inch in length, just within the anus. After putting the patient under the influence of chloroform, and inserting both thumbs into the rectum, he forcibly distended the anus. From that time to the present, over four weeks, the patient had been entirely free from pain, and considered herself cured.—*Proceedings of New York Medical and Surgical Society, in New York Medical Journal.*

ENTOZOA IN VEAL AND BEEF.—Professor Simonds and myself have just succeeded in rearing the larvæ of *Tænia mediocanellata* in a calf, but at present the cysticerci are not perfectly developed. We know, however, that the larvæ are there, not only by the symptoms produced, but also from ocular demonstration; for having removed a very small portion of the right sterno-cleido-mastoid muscle (weighing 22 grains), three minute cysticercus vesicles were discovered in the portion detached. Even if the other muscles (to say nothing of the heart, lungs, and liver) are affected to the same extent only, we shall eventually find not less than 30,000 larval entozoa in this one animal—enough to give 30,000 persons the *Tænia mediocanellata*, should they be severally disposed to swallow a cysticercus.

By a *post hoc propter hoc* kind of reasoning, we might say that the little operation has done good, for the calf is certainly much better since the removal of three of its "guests." Each larva is about the size of a pin's head.—Dr. T. S. COBBOLD in the *Lancet*.

INFANTILE SYPHILIS.—Prof. Sigmund, of Vienna, as the results of sixty-one cases, tells us that when the mother is syphilitic, the child is almost invariably syphilitic also. The intensity of the disease in the child is in proportion to its intensity in the mother, and to the recency of the poisoning of the mother. Infantile syphilis thus acquired is of great gravity. In Dr. Sigmund's sixty-one cases, there were seventeen premature births; and of these, eleven were born dead. Of the forty-four children born at full time, four were born dead. Of the forty-six born alive, four only survived three months. The mean length of their lives was twenty-six days; ninety days being the longest, and one hour the shortest period.—*Med. News and Library.*

THE number of deaths in Providence, R. I., during the month of February, was 112—being 21 more than in February, 1864, and 22 more than the average for February in the last ten years. Scarlatina has been unusually prevalent in that city, 109 deaths having been caused by it during the last four months. This disease is also unusually prevalent and fatal in the towns of North Providence and Cranston.

Dr. Francis G. Smith has resigned his office of Physician to the Pennsylvania Hospital, and Dr. J. M. DaCosta, of the Philadelphia Hospital, has been appointed to fill the vacancy.

Commencement exercises took place at the Ohio Medical College on the 2d of March, and the degree of M.D. was conferred on forty-six gentlemen—the graduating class being one of the largest ever known in the institution.

A prize of \$100 has been offered by Dr. T. C. Brinsmade, of Troy, N. Y., for the best essay on medical and vital statistics—to be awarded by the Committee of the New York State Medical Society on Prize Essays.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, APRIL 1st, 1865.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	48	40	88
Ave. mortality of corresponding weeks for ten years, 1853—1863,	42.5	37.9	80.4
Average corrected to increased population	00	00	82.4
Death of persons above 90	0	0	0

PAMPHLETS RECEIVED.—Annual Report of the City Physician, Boston, 1865.—Fifteenth Annual Report of the Association for the Relief of Aged Indigent Females, Boston.

DIED.—At Onoga, Ill., March 28th, Dr. John W. Hinkley, aged 44, recently of East Boston.

DEATHS IN BOSTON for the week ending Saturday noon, April 1st, 65. Males, 48—Females, 40. Abscess, 1—accident, 3—anaemia, 1—congestion of the brain, 4—disease of the brain, 3—inflammation of the brain, 2—bronchitis, 3—consumption, 17—croup, 2—cyanosis trachealis, 1—diabetes, 1—diarrhoea, 1—diphtheria, 1—dropsy, 2—dropsy of the brain, 2—bilious fever, 1—spotted fever, 1—typhoid fever, 1—gastro-malacia, 1—disease of the heart, 2—infantile disease, 5—insanity, 1—intemperance, 1—disease of the liver, 1—congestion of the lungs, 2—inflammation of the lungs, 6—marasmus, 2—measles, 1—old age, 1—paralysis, 2—phlebitis, 1—smallpox, 6—syphilis, 1—unknown, 6—whooping cough, 1. Under 5 years of age, 36—between 5 and 20 years, 9—between 20 and 40 years, 21—between 40 and 60 years, 17—above 60 years, 5. Born in the United States, 63—Ireland, 20—other places, 5.